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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/407,149	09/28/1999	P. MICHAEL HENDERSON	50944.6500	2375

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EXAMINER

LELE, TANMAY S

ART UNIT

PAPER NUMBER

2681

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/407,149

Applicant(s)

HENDERSON, P. MICHAEL

Examiner

Tanmay S Lele

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings filed on 09/28/1999 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draft Person's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 120. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: frequency modulation in the known AM band of 540 kHz to about 1.6 MHz.

Claim Objections

4. Claim 5 is objected to because of the following informalities: "method" is used in place of "system" (claim 5 line 1). Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The use of multiple transmitters, specialized receivers, special signal tracking methods or the like, critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The applicant claims broadcasting information in a first frequency for a first time period, and broadcasting information in a second frequency for a second time period, wherein the second time period overlaps the first time period, yet indicates that only one transmitter/receiver pair nor indicates in place a tracking method by the receiver (if the claim is to be taken as written).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4, 9, 10, 11, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boys (Boys, US Patent No. 6,314,094).

Regarding claims 1, 11, and 17, Boys teaches of a system for receiving digital information comprising of receiving an audio communication as digital information from a remote source via the Internet and converting the digital information to analog information (column 2, lines 48-55). Boys teaches of transmitting the information in a localized area (as no reference was given by localized, a cellular site was seen to local) and of broadcasting the analog

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information at low power in a localized area in at least one pre-selected radio frequency, or of receiving the broadcast information in the localized area on a radio frequency receiver tuned to at least one frequency to permit listening to the audio communication (described as a wireless cellular system, column 4, lines 15 – 25 and detailed in Figure 1) Boys further detail the system as being an ACMS (Advanced Cellular Mobile Service) using CDDP (Cellular Digital Data Packet and thus broadcast on a specific frequency) and further teaches that other wireless delivery systems could be used (hence, analog or digital, column 4 lines 54 – 64). It would have been obvious to one of ordinary skill in the art, at the time of invention that Boy's system along with common knowledge of cellular systems, describes the claimed. Boy's reference alludes to the use of ACMS, which is known to be analog (note that most cellular phone today have both an analog and digital receiver, as most of the infrastructure is analog) and once again since ACMS is used, this could be seen as localized, as in a cell site. Boys further states that other wireless delivery systems could be used as well. The motivation of these allusions are common knowledge of cellular systems used in the field.

Regarding claim 4. Boys discloses the claimed invention, except for the fact that broadcasting of the analog information comprises broadcasting at a power level less than about 100 milliwatts. It would have been obvious to use a very low power, since the applicant has not disclosed that a power level less than about 100 milliwatts solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with a much lower power to obtain local transmission.

Regarding claims 9 and 10. Boys teaches all the limitations as claimed in claim 1. Boys further teaches that the receiving of digital information comprises receiving music as digital

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information and the receiving of digital information comprises receiving radio program content as digital information (column 4, lines 41 – 62).

Regarding claim 13, Boys teaches of the claimed limitations as recited in claim 1 above. Boys further shows in Figure 2, means for displaying user readable information and describes function (column 6, lines 1 – 19).

9. Claims 2,3, 5-8,12,16,18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boys (Boys, US Patent No. 6,314,094) in view of Lowe et al. (Lowe et al. US Patent No 6,298,218).

Regarding claim 2, Boys teach all the limitations as claimed in claim 1. In addition, Boys teaches of receiving digital information through satellite transmission (wireless transmission, column 2 66-70). Boys does not teach of the step of receiving digital information through a means selected from the group consisting of digital subscriber line transmission, telephone line transmission, or cable transmission. Lowe et al. further teach of receiving digital information through wire-line transmission on a telephone line (column 10 lines 33 –39 and 52 – 56). Therefore, it would have been obvious to a person skilled in the art to include Lowe et al. in Boys, to provide Internet access from a server and it also would have been obvious to use an alternate wire-line method of accessing the Internet server (DSL or cable).

Regarding claim 3. Claim 3 contains all the limitations as recited in claim 1 above. Boys describes reception in a radio frequency modulated waveband in the ranges of from about 88 MHZ to about 108 MHZ (FM radio band) (column 16 lines 3 – 37). Boys does not explicitly state broadcasting. Lowe further teaches of a dual mode receiver (FM and RF) and of broadcasting at radio frequencies (starting column 7, line 54 and ending column 8, line 19). It

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would have been obvious to a person skilled in the art at the time of invention to replace one set of transmitted frequencies for another, as this has been common place in the industry when frequency use in certain bands become over-used and thus crowded, or to utilize a common, mass produced receiver.

Regarding claim 5, Boys teaches all the limitations as recited in claim 1. Lowe et al further teach that broadcasting of the analog information is initiated at a predetermined time and in a predetermined frequency (starting column 3, line 61 and ending column 4, line 10).

Regarding claim 6, Boys teaches all the limitations in claim 1. Lowe et al further teach that the broadcasting comprises broadcasting information in multiple frequencies (column 7, lines 14- 24).

Regarding claims 7 and 8. Boys teaches all the limitations recited in claim 1. Lowe et al further teach the broadcasting comprises broadcasting in a first frequency and broadcasting information in a second frequency for (column 7, lines 14- 24) and include the concept of for a first time period and second period of time (and their possible overlap) by “ a plurality of transmission devices” (column 2, lines 7-16)/.

Regarding claim 12. Boys teaches all the limitations recited in claim 11. Boys does not teach of further comprising means for programming the means for broadcasting, the means for programming comprising a program for setting a time to activate the means for broadcasting. Lowe et al. describe a control link line that can recall data upon trigger (voice, keypad, ect; column 9, lines 6 – 19). It would have been obvious to a person skilled in the art, at the time of invention, that the control link line described by Lowe et al, could have been inserted into Boys

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to achieve setting a time to activate the means for broadcasting, as Lowe et al describe a an interface that initiates playback when activated.

Regarding claims 16 and 18. Boys teaches all the limitations in claims 11 and 17. Boys teaches using cache memory for storing received digital information for broadcasting at a later time and of storing received digital information before converting the digital information to analog information (column 8, lines 24-30). The cache memory Boys discusses is not a large memory buffer for the purposes described. Lowe et al. teach of a large memory module which stores data to be recalled on demand, and further the data types stored (column 9, lines 6-19). It would have been obvious to a person skilled in the art, at the time of the invention, to expand upon Boys' temporary storage to include Lowe et al.'s concept of a large storage buffer, as memory expansion has been commonly practiced in both home industry to achieve increased data storage. Likewise, the issue of time is inherent in the concept of storage as well (saved to be recalled at a later time).

Regarding claim 20. Boys in view of Lowe et. al. teach all the limitations disclosed in claims 17 and 18. Boys in view of Lowe et. al. have taught that the stored digital information is converted to analog and broadcasting the information in a localized area (see claim rejections 17, 18).

10. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boys (Boys, US Patent No. 6,314,094) in view of Dao et al. (Dao et al. US Patent No 5,915,207).

Regarding claims 14 and 15. Boys discusses all the limitations as disclosed in claim 11. Boys teaches of converting the transmissions to analog information for broadcasting. Boys in does not discuss that the means for receiving and means for converting are contained on a PCI

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card, the card receiving transmissions from the Internet, nor do they teach that the means for receiving, means for converting, and means for broadcasting are contained on a PCI card. In the same field of endeavor, Dao et al. teach of a NIC (network interface card) that is available in both PCAT and PCMCIA Type II formats that performs the conversion of wireless Ethernet (Internet data) into Ethernet (Internet data), and furthermore transmits and receives this data all contained on a PCI card (column 5, lines 28-50; also note hard wired NIC's pre-date their wireless counterparts). It would have been obvious to a person skilled in the art, at the time of invention, to include within Boys, the PCI card as taught by Dao et al., as the PCI card receives Internet data on itself and furthermore demonstrated to have the ability to transmit, receive, and convert data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9- 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (703) 305-4778. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.


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